

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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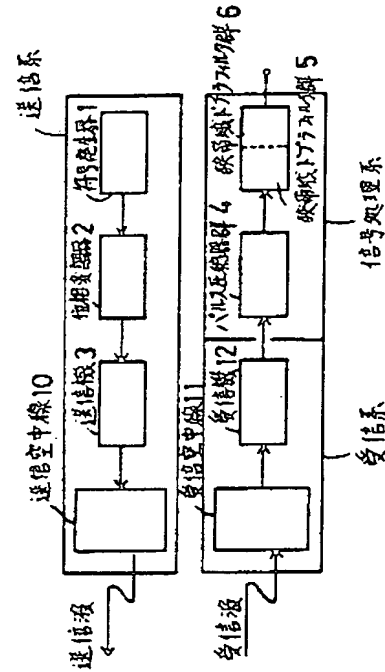
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APPLICANT : TECH RES & DEV INST OF JAPAN DEF AGENCY;

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TITLE : CW RADAR SYSTEM



ABSTRACT : PURPOSE: To achieve a higher measuring accuracy, by performing an integration processing of a pulse compression signal for each of different Doppler frequency components through a group of narrow band Doppler filters to measure the distance and speed of a target avoiding possible vagueness.

CONSTITUTION: Code systems for modulation of a series of transmission waves are generated from a code generator 1. These code systems are transmitted through a phase modulator 2, a transmitter 3 and a transmitting antenna 10. On the other hand, a reflection signal from a target is inputted into a receiver 12 through a receiving antenna 11 to demodulate the original code system signal separately into a component perpendicular to I & Q and after converted into a digital signal, it is inputted into pulse compression devices 4 at both channels I & Q. With the compression devices 4, a pulse compression coefficient is received from the generator 1 and when received signals of the code systems cover all pulse compression devices, pulse compression signals are outputted at the same timing. These signals are inputted into narrow band Doppler filters 6, from which a target signal is outputted according to a Doppler frequency and the presence of the signals is judged by comparing the signal to a noise level through a target detector to be outputted.

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